

REMARKS

Claims 1, 4-9 and 12-17 are pending. Claims 1, 9 and 17 are independent. Claims 1, 6, 9, 14 and 17 have been amended. Claims 2, 3, 10 and 11 have been cancelled without prejudice.

Claims 1-17 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,754,662 (Li) in view of U.S. Patent Publication No. 2004/49494(Kottisa). Applicant submits that the amended independent claims are patentable for at least the following reasons.

Amended independent claim 1 is directed to a packet search device that includes, inter alia, a first search processor that searches predetermined conditional statements corresponding to a plurality of information areas included in header information of an inputted packet, to generate first search results using a first search method. The packet search device also includes a second search processor that searches the first search results of the first search processor using a second search method that is different from the first search method.

The first search processor divides the packet header information into a plurality of information areas and searches across each search conditional statements structured as binary search trees for each of the information areas separately, and the second search processor searches aggregated search results of the first search processor using a Hash method.

By virtue of the claimed structure, search trees are divided since searches are performed for each information area separately. As a result, search trees are smaller and therefore more easily managed than trees that are not so divided, and editing processing is curtailed. Also, because the search processing of the information areas involve no interdependency among them, the search processing can be carried out in parallel, speeding up the search processing.

Further, the second search utilizes a Hash method to perform search on the aggregated search result. As a result, less Hash values are required and high speed searching can be achieved.

Li, discussed in previous responses, contains no teaching that header information of a packet is divided into a plurality of information areas and each information area is searched across each conditional statement structured as a binary search tree separately. Moreover, Li does not teach that search results of all information areas are aggregated and the aggregated search result is searched using a Hash method.

Kottisa fails to remedy the aforementioned deficiencies of Li as a reference.

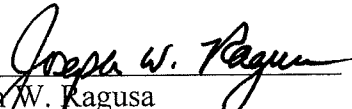
Thus, even if Li and Kottisa are combined, they do not teach or suggest all of the elements recited in amended claim 1. The other amended independent claims recite substantially similar limitations and are believed patentable for at least the same reasons as claim 1. The dependent claims are believed patentable for at least the same reasons as their respective base claims.

Entry of this amendment is respectfully requested.

In view of the foregoing amendments and remarks, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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